

ULAVI TANK FILLING SCHEME - SITE INSPECTION REPORT

Introduction to the project

Ulavi Tank Filling Scheme aims to fill the three tanks namely Vyangin Kere, Veerabhadreshwara Kere and Shivathirth Kere in Kadagarni and Ulavi villages of Joida taluk of Uttara Kannada district. Since the catchment area of these three tanks are small they dry up during the summer months especially in years when the rainfall is below average. The nearest perennial water source is River Kaneri. The project proposes to fill the three tanks by lifting the water impounded behind an ungated weir constructed across River Kaneri near Amboli Village. The stream bed is rocky and with sparse riverine shrubby vegetation. The impounded water extending upto a kilometre behind the weir is fully accommodated within the stream bed.

The water is proposed to be lifted by vertical turbine pumps located in a Jack well and pump house near the weir. The Rising Main takes off from the lift point and follows the right side of Anshi-Ulavi Road for a length of 5150 metres till it reaches delivery chamber. Gravity Main is proposed to take the water from Delivery Chamber along with Gravity Sub Main 1 and 2 which will feed the three tanks. The total length of the Gravity distribution network is 4991 metres. The pumping of water is during the month of January-February with 16 hours of pumping per day for 60 days.

The Pipeline is HDPE material and is proposed to lay below ground and adjacent to existing road along most of its length. The total water requirement is estimated to be 7.34 Mcft. The pipeline will serve the drinking water needs of the two villages Kadagarni and Ulavi. Ulavi being a pilgrim site sees a large number of visitors in the month of February during the annual festival. This project is expected to solve the shortage of water in Ulavi during this period.

The total forest land required for the project is 0.6710 Hectare of which more than 70 percent (0.4989 Ha) is required for underground pipeline. The construction sites of Weir, Jackwell, Foot bridge and Delivery Chamber all are in areas without tree growth in existing open patches. The project thus does not require any felling of trees.

Ecology

The project is located in Anshi National Park (ANP) which is part of the Core of Kali Tiger Reserve. ANP is known for its rich biodiversity. Major part of ANP is hilly terrain with many streams and nalas. ANP is mainly drained by two major perennial rivers Kaneri and Kali. The climate is marked by three seasons namely dry, wet and cold season. The dry season commences in February and

lasts till May. The wet season starts from end of May and lasts upto end of October. The cold season starts from November and lasts up to January. The rainfall particularly during the Monsoon is heavy to very heavy. The average rainfall is between 3000-7000 mm in most of the areas of ANP. The climate in general is humid and wet.

The flora is represented by rich moist deciduous, semi evergreen and evergreen type of forests with different plant communities. The forest types represented are: South Indian Moist Deciduous Teak Forests (3B/C1), Southern Moist Mixed Deciduous Forests (3B/C2), West Coast Semi-evergreen Forests (2A/C2), Moist Bamboo Brakes (2B/E3), Cane Brakes (2B/E1). The region is known for its unique biodiversity with high degree of endemism. The list of highly threatened and endemic life forms occurring in these areas include Black panther (melanistic leopard), King cobra, Malabar pied hornbill, Ceylon frogmouth, Wroughton's free tailed bat (*Otomops wroughtom*), Theobald's Bat (*Taphozous theobaldi*) etc. The other important fauna of this region include Tiger, common Leopard, Dhole, Jackal, Elephant, Gaur, Sambar Deer, Spotted Deer, Barking Deer, Mouse Deer, Sloth Bear, Hanuman Langaur, Bonnet Macaque, Indian Giant Squirrel, Flying Squirrel, Pangolin, 272 bird species, reptiles such as Indian Gliding Lizard (*Draco dussumieri*), amphibians (29 species), butterflies, and other small cats. The largest Indian butterfly Southern Birdwing and the endemic Malabar Tree Nymph are found in good population.

The major communities inhabiting the project area are Konkani Kunbis and Konkani Marathas. Apart from the presence of several indigenous communities in the landscape, who live in tiny enclosures within the forests, the region also witnessed large scale agricultural expansion during the last century along with establishment of several river valley projects.

Impact of Project

The lasting negative impacts of the project is limited and mainly restricted to the construction phase. Since most of the forest land required by the project (for laying pipeline) is open land and already under utilization for public highway the impact is minimal. The impounded water behind the diversion weir is stored within the stream bed. A short stretch of the pipeline along the Gravity Sub Main cuts through the forest. But since the pipeline is small enough (outer diameter of 16-20 cm) it can be accommodated without disturbing the vegetation and felling of trees. Overall the impact of the project is minimal and can be mitigated.

Recommendation

The site was inspected by the undersigned on 21/12/2020. The project will improve the water security of two villages Kadagarni and Ulavi. It is an essential project and is designed to have the least impact on Anshi National Park. It is recommended that the forest land to the extent of 0.6710 Ha required for the project may be diverted.

The following mitigation measures are proposed to protect the interest of wildlife during and after the execution of the project:

1. The construction work shall be restricted to day time hours i.e. between 6 AM to 6 PM.
2. No structures shall be allowed for housing labourers engaged in the construction activities for overnight stay at project site.
3. The acoustics of the pump house and jack well should be designed in such a way to minimize noise to bare minimum to avoid disturbance to wildlife.
4. Closure of night traffic in Anshi-Ulavi Road between 6 AM and 6 PM except for local residents and emergency services.
5. The implementing agency shall abide by the conditions laid down by the forest officials in-charge of the project area in the interest of protecting and minimizing disturbance to wildlife during construction phase and after completion of the project.

Field Director



Kali Tiger Reserve